

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017478**Date Inspected:** 20-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC)**Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>			
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG Trial Assembly				

**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Anchorage Bearing Stiffeners at Machine Shop # 1(for Lift 14- East and West)

This QA Inspector performed Dimension Control Inspection to check and measure the Anchorage Bearing Stiffeners at machine shop # 1. The following dimensional inspection was performed.

The scribe line distances of anchor rod were measured.

The offset were measured from scribe line.

The vertical spacing between the bearing stiffeners at four locations were measured.

The vertical offset between bearing stiffeners at two locations were measured.

The QA Inspector verified the surface condition met the mill to bear condition at MTB1, MTB2 and MTB3

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locations.

The Anchorage Bearing Stiffeners piece marks are identified below.

-Anchorage Bearing Stiffeners identified as SA3369F and top plate piece mark identified as X4747J.

-Anchorage Bearing Stiffeners identified as SA3369J and top plate piece mark identified as X4747R.

-Anchorage Bearing Stiffeners identified as SA3353B and top plate piece mark identified as X4740B.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

### Segment 12BE (Green Tag DCP)

This QA Inspector performed Green Tag Dimension Control Inspection along with Caltrans QA Inspector Mr. Murugan Manikandan for the Segment 12BE from Panel Point (PP) 112.75 to PP 114.75 at the following locations:

The Floor Beam (FB) flatness were verified and measured from East and West side of the FB at Panel Points (PP) 113 and PP 114. The QA Inspector measured the flatness using 1500mm straight edge.

The Deck Panel to the Deck Panel Diaphragm plate plumbness and flatness were verified and measured from east and west side of the Deck Panel Diaphragm at Panel Points (PP) 113, PP 113.5, PP 114 and PP 114.5. The QA Inspector measured the plumbness using carpenter square and performed a flatness check using 710mm straight edge.

The skin flatness was verified and measured across the longitudinal butt weld at Side Panel (SP) to Corner Assembly (CA) at the Cross Beam (CB) side from Panel Point (PP) 112.75 to PP 114.75. The QA Inspector measured the skin flatness using 600mm straight edge.

The skin flatness was verified and measured across the longitudinal butt weld at Deck Panel (DP) to Corner Assembly (CA) at the Cross Beam (CB) side from Panel Point (PP) 97.75 to PP 100.75. The QA Inspector measured the skin flatness using 600mm straight edge.

The diameter of the cope holes at the Corner Assembly (CA) were verified and measured at Panel Points (PP) 113, PP 113.5, PP 114 and PP 114.5 at the Cross Beam (CB) and Bike Path (BK) side. The QA Inspector measured the diameter of the cope holes using a 150mm steel ruler.

The protrusion of the Deck Panel (DP) stiffener inside cope holes area at the Corner Assembly (CA) were verified and measured at the Panel Points (PP) 113, PP 113.5, PP 114 and PP 114.5 at the Cross Beam (CB) and Bike Path (BK) side. The QA Inspector measured the protrusion of stiffener using a 150mm steel ruler.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the

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Lead Inspector and Engineer for review and disposition.

Suspender Bracket at Bay # 19

This QA Inspector performed Dimension Control Inspection along with ABF QA Inspector to check and measure the Suspender Bracket (SB) lifting rod hole spacing by placing the socket template at the following suspender brackets.

SB 86W which will be installed at Segment 10AE, Bike Path side.

SB 88W which will be installed at Segment 10AE, Bike Path side.

SB 90W which will be installed at Segment 10BE, Bike Path side.

SB 92W which will be installed at Segment 10CE, Bike Path side.

SB 94W which will be installed at Segment 10CE, Bike Path side.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Bike Path at Bay # 19

This QA Inspector performed Dimension Control Inspection on the Bike Path bottom panel for flatness check and bike path identified as BK4A-012.

The QA Inspector measured the flatness using 1500mm long straight edge and observed flatness dimensions within the allowable tolerance.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Math,Manjunath	Quality Assurance Inspector
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<b>Reviewed By:</b>	Peterson,Art	QA Reviewer
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